

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Wilson on 2/5/10.

The application has been amended as follows:

IN THE CLAIMS:

Claim 9 has been amended as follow:

--9. (currently amended) A charge pump circuit for use in a frequency detector arrangement, said charge pump circuit comprising:

- a) a differential input circuit having first and second differential branches for carrying first and second modulated currents;
- b) [modulating means for modulating first and second current sources respectively arranged in said first and second differential branches] first and second current mirror circuits (CM) respectively provided in said first and second differential branches and arranged to copy the modulated current of one differential branch into the respective other differential branch; and
- c) control means for controlling a tail current of said differential input circuit in response to a frequency-locked state of said frequency detector arrangement.--

Claim 10 has been cancelled.

Non-elected claims 1-8 and 13-14 have been cancelled.

Claim 12, line 1, "laim" has been replaced by --claim--.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: a charge pump and a method for controlling the same are disclosed. The closest prior art, Abidin et al US Patent No. 6,771,102, discloses similar method and apparatus. However, Abidin et al does not teach or fairly suggest, in combination with the other claim limitations, the limitations recited in claim 9 sections b) and c), and the limitations, recited in claim 15, sections a) and c).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Monday-Thursday from 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean B Corrielus/
Primary Examiner, Art Unit 2611